

# Psychology

**Course Description:** *Students will study the development of scientific attitudes and skills, including critical thinking, problem solving, and scientific methodology. Students will also examine the structure and function of the nervous system in human and non-human animals, the processes of sensation and perception, and life span development. Students will study social cognition, influence, and relations. Students will examine social and cultural diversity and diversity among individuals. Students will study memory, including encoding, storage, and retrieval of memory. Students will also study perspectives of abnormal behavior and categories of psychological disorders, including treatment thereof. Students will elaborate on the importance of drawing evidence-based conclusions about psychological phenomena and gain knowledge on a wide array of issues on both individual and global levels. Throughout the course, students will examine connections between content areas within psychology and relate psychological knowledge to everyday life. Students will explore the variety of careers available to those who study psychology.*

## **Scientific Inquiry Domain**

### ***Research Methods, Measurement, and Statistics***

*Students will describe research methods and measurements used to study behavior and mental processes and identify ethical issues in research with human and non-human animals. Students will also explain basic concepts of data analysis.*

P.1 Describe the scientific method and its role in psychology.

P.2 Describe and compare a variety of quantitative and qualitative research methods including:

- Surveys
- Correlations
- Experiments
- Interviews
- Narratives
- Focus groups

P.3 Elaborate on systematic procedures used to improve the validity of research findings, including external validity.

P.4 Discuss how and why psychologists use non-human animals in research and identify ethical guidelines to follow regarding this type of research.

P.5 Identify ethical standards psychologists must follow regarding research with human participants.

P.6 Explain descriptive statistics and qualitative data and explain how they are used by psychological scientists.

P.7 Define correlation coefficients and explain their appropriate interpretation.

P.8 Interpret graphical representations of data as used in both quantitative and

qualitative methods and explain other statistical concepts, such as statistical significance and effect size.

P.9 Explain how validity and reliability of observations and measurements relate to data analysis.

## **Biopsychology Domain**

### ***Biological Bases of Behavior***

*Students will explore the structure and function of the nervous system in human and non-human animals and describe the interaction between biological factors and experience. Students will also describe and discuss methods and issues related to biological advances.*

P.10 Identify the major divisions and subdivisions of the human nervous system.

P.11 Identify the parts of the neuron and describe the basic process of neural transmission.

P.12 Differentiate between the structures and functions of the various parts of the central nervous system.

P.13 Describe lateralization of brain functions.

P.14 Discuss the mechanisms and the importance of plasticity of the nervous system.

P.15 Describe how the endocrine glands are linked to the nervous system.

P.16 Describe how hormones affect behavior and mental processes.

P.17 Describe how hormones affect the immune system.

P.18 Analyze concepts in genetic transmission.

P.19 Describe the interactive effects of heredity and environment.

P.20 Explain how evolved tendencies influence behavior.

P.21 Identify tools used to study the nervous system.

P.22 Describe advances made in neuroscience and discuss issues related to scientific advances in neuroscience and genetics.

### ***Sensation and Perception***

*Students will explain the processes of sensation and perception and describe the interaction between the person and the environment to determine determining perception.*

P.23 Examine the processes of sensation and perception and elaborate on how they interact.

- P.24 Explain the concepts of threshold and adaptation.
- P.25 List forms of physical energy for which humans and nonhuman animals do and do not have sensory receptors.
- P.26 Describe the visual, sensory and auditory sensory systems.
- P.27 Describe other sensory systems, including olfaction and gustation, and identify skin senses, kinesthesia, and vestibular sense.
- P.28 Explain Gestalt's principles of perception.
- P.29 Describe binocular and monocular depth cues.
- P.30 Describe the importance of perceptual constancies.
- P.31 Describe perceptual illusions and the nature of attention.
- P.32 Explain how experiences and expectations influence perception.

## **Development and Learning Domain**

### ***Life Span Development***

*Students will examine and describe methods, issues, and theories in life span development, including prenatal development, infancy, childhood, adolescence, adulthood, and aging.*

- P.33 Explain the interaction of environmental and biological factors in development, including the role of the brain in all aspects of development.
- P.34 Explain issues of continuity/discontinuity and stability/change.
- P.35 Distinguish methods used to study development.
- P.36 Describe the role of sensitive and critical periods in development.
- P.37 Discuss issues related to the end of life.
- P.38 Discuss cognitive, moral and social development theories.
- P.39 Describe physical development from conception through birth and identify influences on prenatal development.
- P.40 Describe the reflexes, temperament, and abilities of newborns.
- P.41 Elaborate on physical and motor development during infancy.
- P.42 Describe the development of infant perceptual abilities, intelligence, memory, thinking ability, communication and language.
- P.43 Describe social, cultural, and emotional development through childhood.

- P.44 Identify major physical changes.
- P.45 Describe the development of reasoning and morality.
- P.46 Describe the formation of identity.
- P.47 Examine the role of family and peers in adolescent development.
- P.48 Identify major physical changes associated with adulthood and aging.
- P.49 Describe cognitive changes that occur in adulthood and throughout the aging process.
- P.50 Assess the social, cultural, and emotional issues in aging.

### **Sociocultural Context Domain**

#### ***Social Interactions***

*Students will describe and discuss social cognition, influence, and relations.*

- P.51 Describe attributional explanations of behavior.
- P.52 Describe the relationship between attitudes (implicit and explicit) and behavior.
- P.53 Identify persuasive methods used to change attitudes.
- P.54 Describe the power of the situation.
- P.55 Describe the effects of others' presence on individuals' behavior.
- P.51 Describe how group dynamics influence behavior and how an individual influences group behavior.
- P.52 Elaborate on the nature and effects of stereotyping, prejudice, and discrimination.
- P.53 Describe the determinants of prosocial behavior.
- P.54 Discuss influences on aggression and conflict.
- P.55 Discuss factors that influence attraction and relationships.

#### ***Sociocultural Diversity***

*Students will examine social and cultural diversity and diversity among individuals.*

- P.56 Define culture and diversity.
- P.57 Identify how cultures change over time and vary within and across nations.
- P.58 Analyze the relationship between culture and conceptions of self and identity.

- P.59 Interpret and explain the psychological research that examines race and ethnicity.
- P.60 Discuss psychological research that examines socioeconomic status.
- P.61 Discuss how privilege and social power structures relate to stereotypes, prejudice, and discrimination.
- P.62 Discuss psychological research examining gender similarities and differences and impacts of gender discrimination.
- P.63 Discuss the psychological research of gender and how the roles of women and men are perceived in society.
- P.64 Examine how perspectives affect stereotypes and treatment of minority and majority groups in society.
- P.65 Discuss psychological research examining differences in individual, cognitive and physical abilities.

## **Cognition Domain**

### ***Memory***

*Students will analyze encoding, storage, and retrieval of memory.*

- P.66 Identify factors that influence encoding.
- P.67 Characterize the differences between shallow (surface) and deep (elaborate) processing.
- P.68 Discuss the strategies for improving the encoding of memory.
- P.69 Describe the differences between working memory and long-term memory.
- P.70 Identify and explain biological processes related to how memory is stored.
- P.71 Discuss the types of memory and memory disorders including amnesias and dementias.
- P.72 Discuss the strategies to improve the storage of memories.
- P.73 Analyze the importance of retrieval cues in memory.
- P.74 Explain the role that interference plays in the retrieval of memories.
- P.75 Discuss the factors influencing how memories are retrieved and strategies for improving the retrieval of memories.
- P.76 Explain how memories can be malleable.

## ***Psychological Disorders***

*Students will explore perspectives on abnormal behavior and categories of psychological disorders.*

P.77 Define psychologically abnormal behavior.

P.78 Describe historical and cross-cultural views of abnormality and major models of abnormality.

P.79 Discuss how stigma relates to abnormal behavior.

P.80 Discuss the impact of psychological disorders on the individual, family and society.